

THE GLIDDEN TOUR

Men Who have Made the Fastest Tracks in the World.

WHAT good can come from a heart-breaking tour of more than 3,000 miles, covering the roads of several states, trying out some of the worst excuses for "highways" that may be found anywhere in the world, as well as some of the best?

This question in some one of many forms is asked by the many who know of the Glidden Tour only by name. They know that it is an event of importance to the automobile world, but on what does its

builder; he must produce a power plant for his machine that will meet the requirements under any sort of actual use. It must not only develop, but transmit energy cheaply and efficiently; must show the maximum of strength and capacity to the minimum of weight and bulk. It must be reliable, too, and simple, so that it may be depended upon at all times, and that its adjustments will not present any difficulties beyond

the comprehension of the owner, whose mechanical knowledge is necessarily limited to few fundamentals. When this engine is built, it is connected up with a series of similar problems, dealing each with its own separate function in connection with the whole.

Transmission and control are studied carefully; the chassis gets its care, the shape of the tonneau, the construction of the wheels, the tires, and a host of other little things are all factors in the one great proposition before the builder, and when he has each worked out in detail, he is face to face with the still greater

any one of the multitude of things that may happen to a car while running on the road, is set down against it, and a penalty assessed according to the enormity of the offense viewed from the standpoint of perfect service. This means that a car that goes through the Glidden Tour ordeal with a clean record is a machine that deserves its distinction. It may not be perfect in itself; the test may develop many points on which improvement is possible, but it has proven reliable and roadworthy, and the owner of that make of car is given a substantial guaranty that his machine may be depended upon.

Nor is it machines alone that are tested by the Glidden Tour. Tires and oils, lamps, brakes, speedometers and all the myriad of accessories that enter into the equip-

ment of the perfectly-appointed automobile, are tried out in this same way. The actual conditions of service are there, and the test proves which one is worthy and which one fails. Makers and dealers in these articles have a deep interest in the tour, as well as the men who build the cars, for everything depends on the verdict at the end of the long grind.

The farmer along the route, once the implacable enemy of everything akin to motordom, is experiencing a change of heart and is, as general rule, inclined to extend welcome to the passing tourist, and a general interest is shown in the proposition—in fact, the farmer himself is turning to the motor.

For the men who go on the Glidden Tour is also reserved a test. They may

look upon it as a lark, in a way, but the hardships they must endure and privations they must patiently put up with, makes it quite as much a trial for the hardihood and capacity of the men as for the staying qualities of the machine. Two hundred miles isn't such a long ride to take in an auto, when the miles are reeled off over fine roads, paved or macadamized, but when the 200-mile daily grind is taken over all sorts and conditions of roads, of bridgeless creeks, stretches of sands, uncharted hills and under skies that blaze from sun-up till sun-down, the pleasure of the Glidden Tour may well be questioned. But the veterans of the tour never quaver; they know the game, and they know the prize they are playing for, and it is the rigor of the contest that gives it zest.

importance rest? Can not as much be accomplished under less stressful conditions? Is it not possible to test machines and demonstrate their capacity in a manner that does not require so much expenditure of time and energy?

Machines and their equipment may be tested under a variety of conditions. From the experimental stage of their construction up to the day they are put on the market, or even into the hands of the "ultimate consumer," the automobiles are given every conceivable test and examination, to determine just what may be expected of them; to find out how near the designer has come to solving the problem; to determine the success of the mechanics in carrying out the plans of the builder, and to find out under what sort of service conditions the various parts give the best results. And no condition for test is quite equal to the test of actual use. When a machine has been "on the road" for a sufficient length of time, it begins to tell its own story. Mistakes that might be overlooked in the hurry of shop inspection then become known. Adjustments may be made in the factory that will not hold in use, and these show up when the machine is in actual service. Structural weaknesses may become apparent; for it is easy to design a perfect car on paper, and quite another thing to get it mounted on wheels, and actually running. So many, many factors enter into the problem that it would be tedious to undertake a catalogue of them.

Engine efficiency is the first study of the

problem of assembling his individual units into a harmonious whole, and making it work successfully. If this can be done under shop conditions, well and good. The next thing is the service test, and here the assembled car is tried under conditions that test it in such ways as will disclose any inherent weakness in design or construction.

Thus the maker discovers the faults in his design and sets himself about to remedy them.

For the Glidden Tour tests the car. That is its primary purpose and for which it alone exists. It is intentionally made severe, in the view of sounding the merits of the competing cars. Each car entered in the contest is there under exactly the same conditions as the others. All must traverse the same roads; they start in the morning from the same point, and they lay up over night at the same "control," which is the technical word for the night stopping place, being derived from the fact that the cars are parked together for the night, and the machines are actually under control while their drivers are not in them, this being done to prevent surreptitious adjustment of mechanical failures. Along with the cars travel expert observers, whose sole business it is to notice the action of the machine under way. Any failure, from a loose nut or bolt to a broken axle; a missed cylinder, a clogged carburetor, an overheated engine, a defective tire, a hot box.

